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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,177	12/20/2005	Olivier Bouaziz	Q87890	2384
23373	7590	06/27/2008	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			ZIMMERMAN, JOHN J	
			ART UNIT	PAPER NUMBER
			1794	
			MAIL DATE	DELIVERY MODE
			06/27/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/535,177

Applicant(s)

BOUAZIZ ET AL.

Examiner

John J. Zimmerman

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8-10 is/are rejected.
- 7) ☒ Claim(s) 4-7 and 11-23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 5/17/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 20050517

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

FIRST OFFICE ACTION

Preliminary Amendments

1. No preliminary amendment has been found in this application file. The claims have been examined in the condition in which they were filed. Claims 1-23 are pending in this application.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement received May 17, 2005 has been considered. An initialed form PTO-1449 is enclosed with this First Office Action.

Specification

4. The abstract of the disclosure is objected to since it does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Art Unit: 1794

Claim Objections

5. Claims 4-7 and 11-23 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend on another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 4-7 and 11-23 have not been further treated on the merits.

Claim Rejections - 35 USC § 102/103

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(d) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-2 are rejected under 35 U.S.C. 102(a) as being anticipated by Clyne (U.S.

Patent Application No. 2003/0082335).

9. Clyne discloses a sandwich material comprising two outer plates separated by a fibrous core. The sandwich material is easy to weld (e.g. see paragraphs [0005] and [0009]). The outer plates can be a variety of metals, but stainless steel, steel, aluminum and titanium are preferred (e.g. see paragraph [0011]). The fibrous core can be a variety of metals, but stainless steel, steel, aluminum and titanium are preferred (e.g. see paragraph [0017]). The fibrous core has an open structure occupying 5-50% of the area (e.g. see paragraph [0015]). The core is affixed to the outer plates with a braze (i.e. a lower melting point metal) that can be applied to either the core or the outer plates (e.g. see paragraph [0026]). An example is two stainless steel plates coated with a metal braze to a fibrous stainless steel core of 0.19 volume fraction (e.g. see paragraph [0032]).

10. Claims 1-3 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clyne (U.S. Patent Application No. 2003/0082335).

11. Clyne discloses a sandwich material comprising two outer plates separated by a fibrous core. The outer plates can be a variety of metals, but stainless steel, steel, aluminum and titanium are preferred (e.g. see paragraph [0011]). The fibrous core can be a variety of metals,

but stainless steel, steel, aluminum and titanium are preferred (e.g. see paragraph [0017]). The fibrous core has an open structure occupying 5-50% of the area (e.g. see paragraph [0015]). The core is affixed to the outer plates with a braze (i.e. a lower melting point metal) that can be applied to either the core or the outer plates (e.g. see paragraph [0026]). An example is two stainless steel plates coated with a metal braze to a fibrous stainless steel core of 0.19 volume fraction and wherein the assembly is clamped and heated to bond the metal plates to the core (e.g. see paragraph [0032]). Regarding claim 3, the core open structure of 5-50% disclosed by Clyne overlaps the claimed range and it would have been obvious to one of ordinary skill in the art at the time the invention was made to practice the invention of Clyne over his entire disclosed range. Regarding the bonding temperature of claim 8, it would have been obvious to one of ordinary skill in the art at the time the invention was made to determine a proper brazing temperature sufficient to melt the braze but not so high that it damages the product. Regarding claim 9, the assembly of Clyne is clamped together during bonding. It would have been obvious to one of ordinary skill in the art that the clamp would need to provide sufficient pressure to assure good bonding, but not so high a pressure that the product is damaged. Regarding claim 10, although Clyne may not disclose using induction heating to heat the product, the examiner takes Official Notice that induction heating is a common alternative heating process used in brazing operations. In view of the Official Notice, it would have been obvious to one of ordinary skill in the art to use induction heating for the bonding step of Clyne since induction heating is a proven heating process in the brazing art.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional prior art made of record serves to further establish the level of ordinary skill in the art.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Zimmerman whose telephone number is (571) 272-1547. The examiner can normally be reached on 8:30am-5:00pm, M-F. Supervisor Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John J. Zimmerman
Primary Examiner
Art Unit 1794

/John J. Zimmerman/
Primary Examiner, Art Unit 1794

jjz
June 22, 2008